

R. TYPHOON MAMIE (132200Z-210600Z OCTOBER 1960)

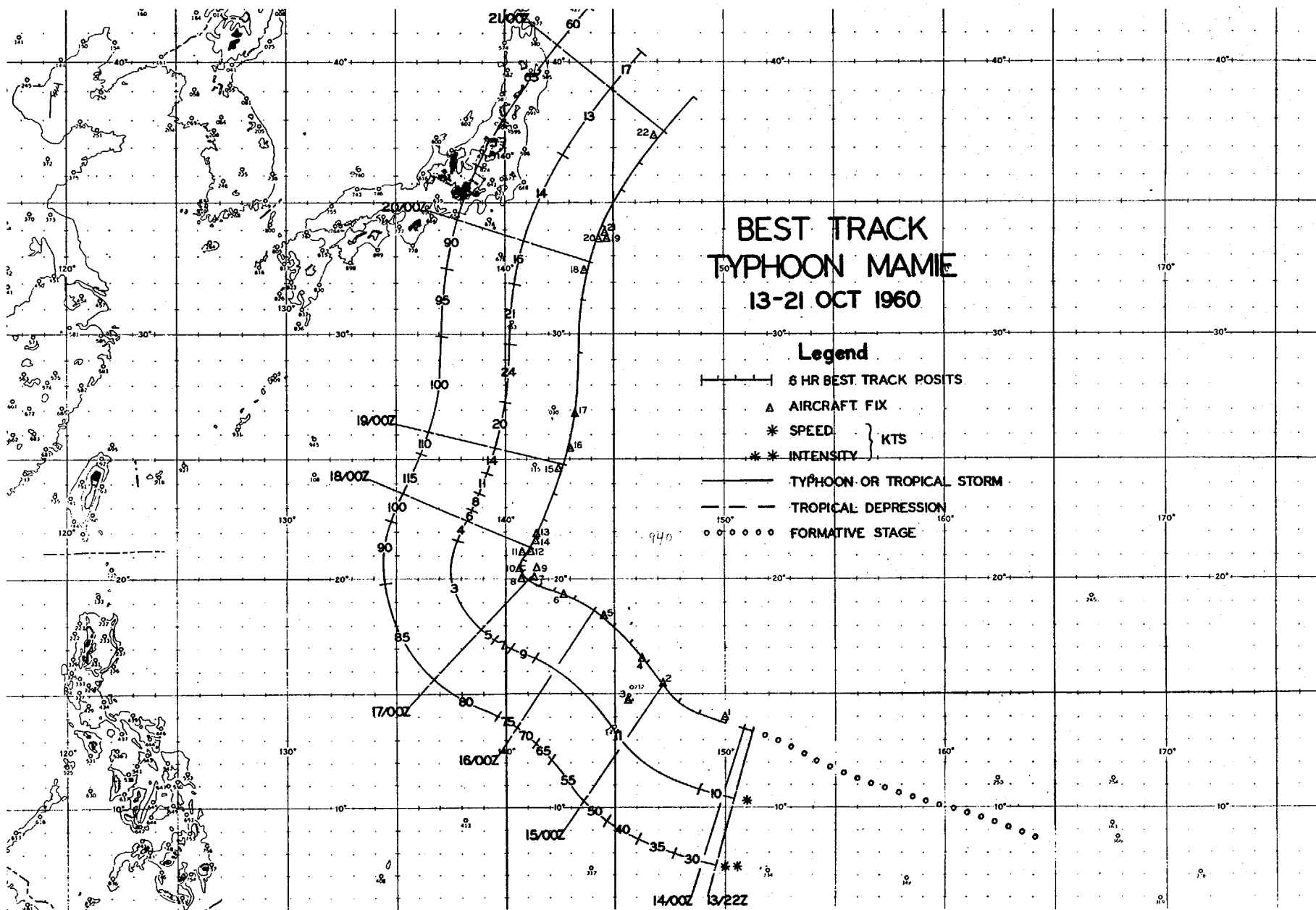
The first closed isobar was transcribed around the depression, that was to become the largest typhoon of the season, at 101800Z near Kwajalein. By the time the first warning was issued on T.D. 21, it was more than 1300 mi in diameter, encompassing an area of more than 1,300,000 square mi. At 171800Z the approximate area within the greatest closed isobar of this fully developed typhoon was 1,200,000 square mi, and the area of cyclonic circulation was twice that total. When the last warning was issued at 210600Z, Typhoon MAMIE enclosed an area of only 324,000 square mi.

The first warning was issued on MAMIE 370 mi E of Guam at 132200Z, when the maximum wind circulation about the depression was 25 kts. MAMIE moved along a WNW track at 11 kts, passing 175 mi NE of Guam at 150000Z with surface winds of 50 kts near the center. It became a typhoon at 151200Z, about 220 mi NNE of Guam. The typhoon continued to a point near 20N 141E, slowed to 3 kts, turned just E of N, and then accelerated rapidly to 24 kts over a distance of 370 mi in a period of 36 hours. MAMIE was 70 mi E of Iwo Jima at 190000Z and about 50 mi E of Peel Island at 190700Z. The typhoon passed nearest Japan at 200600Z, 275 mi ESE of Tokyo. The last warning was issued 24 hours later, after which MAMIE became extratropical. The surface winds were 60 kts at that time.

MAMIE traveled about 1950 mi from the first to last warning, and lasted 8 hours longer than one week. The minimum speed was 3 kts on 17 October; the maximum speed was 24 kts on 19 October; the average speed was 11 kts or 267 mi per day. Warnings were being issued simultaneously on Typhoons LOLA and MAMIE.

MAMIE was probably intense enough to be a closed circulation at the 200 mb level. The Iwo Jima 200 mb winds turned with the approach of MAMIE; however, the last report was received at 180600Z, due to equipment failure when the typhoon was 180 mi to the S. Consequently, reports with W wind components are not available. This was the only station along the track of MAMIE that could have provided this information.

MAMIE was the largest typhoon of the 1960 season, comparable in size to the large ones of other years. To picture the area influenced by this typhoon, consider that the surface circulation was cyclonic, covering an area bounded by Japan, the Philippines, Truk, Marcus, and then Japan.



RECONNAISSANCE AIRCRAFT FIXES - TYPHOON MAMIE

FIX NO.	TIME	LAT.	LONG.	UNIT METHOD & ACCY	MIN SLP MBS	MAX SFC WND	MIN 700MB HGT	MAX 700MB WND	700MB TT/Td (°C)	EYE CHARACTERISTICS
1	140630Z	14.0N	150.0E	VW1-----	- -	- -	- - -	- -	- - -	- - - - -
2	142204Z	15.3N	147.1E	56-P-08	996	50	10150 ⁹⁹⁷	54	09/05	CIRC DIA 40 MI
3	150100Z	14.8N	145.5E	VW1-R-05	- -	- -	- - -	- -	- - -	ELONG EYE DIA 40 MI
4	150715Z	16.4N	146.2E	56-P-02	985	35	9980 ⁹⁹⁵	40	11/07	NOT DEFINED ON RADAR
5	152130Z	18.4N	144.5E	56-P-05	980	70	9740 ⁹⁸¹	60	12/09	NOT DEFINED
6	160800Z	19.3N	142.8E	56-P-20	979	75	9540 ⁹⁸⁰	65	17/11	CIRC DIA 40 MI OPEN W
7	162250Z	20.1N	141.2E	56-P-05	976	60	9490 ⁹⁷⁸	55	12/10	CIRC DIA 20 MI
8	170258Z	20.0N	140.8E	56-P-08	962	65	9410	57	12/10	CIRC DIA 35 MI
9	170439Z	20.5N	141.5E	VW1-R-10	- -	- -	- - -	- -	- - -	DIA 50 MI
10	170815Z	20.4N	140.8E	56-P-10	950	55	8940 ⁹⁵⁰	70	15/06	CIRC DIA 40 MI
11	172130Z	21.1N	140.9E	56-P-05	948	80	8860 ⁹⁵⁰	85	16/10	CIRC DIA 20 MI WELL DEFINED
12	180230Z	21.1N	141.1E	56-P-10	946	80	8630	90	17/11	CIRC DIA 15 MI
13	180720Z	21.9N	141.4E	56-P-10	940	80	8420 ⁹⁴⁰	95	17/10	CIRC DIA 40 MI
14	180522Z	21.7N	141.4E	VW1-R-05	- -	- -	- - -	- -	- - -	CIRC DIA 30 MI
15	182120Z	24.7N	142.4E	56-P-15	946	40	8650	85	16/12	DIFFUSE DIA 40 MI
16	190215Z	25.3N	143.0E	56-P-05	960	- -	8630	90	16/16	CIRC DIA 35 MI
17	190615Z	26.9N	143.1E	56-P-05	958	150	8720	90	17/17	SEMICIRC DIA 30 MI
18	192200Z	32.4N	143.8E	56-P-05	966	90	9340	60	20/02	NOT DEFINED
19	200100Z	33.7N	143.7E	56-P-11	972	85	9530	80	23/03	NOT DEFINED
20	200245Z	33.7N	144.2E	56-P-20	- -	70	9530	30	21/03	NOT DEFINED

RECONNAISSANCE AIRCRAFT FIXES - TYPHOON MAMIE (CONT'D)

FIX NO.	TIME	LAT.	LONG.	UNIT METHOD & ACCY	MIN SLP MBS	MAX SFC WND	MIN 700MB HGT	MAX 700MB WND	700MB TT/Td (°C)	EYE CHARACTERISTICS
21	200545Z	33.9N	144.8E	56-P-05	980	50	9550	40	20/06	FILLED WITH SC NO WALL CLDS
22	202300Z	37.4N	146.9E	56-P-03	993	70	- - -	- -	- - -	CIRC OPEN S

TYPHOON MAMIE 13-21 OCTOBER 1960
POSITION AND FORECAST VERIFICATION DATA

DTG	STORM POSITION		24 HR. ERROR		48 HR. ERROR	
	LAT.	LONG.	DEG.	DISTANCE	DEG.	DISTANCE
132200Z	13.3N	151.2E	- - - -		- - - -	
140000Z	13.5N	150.9E	- - - -		- - - -	
140600Z	13.8N	150.0E	- - - -		- - - -	
141200Z	14.1N	148.9E	- - - -		- - - -	
141800Z	14.6N	147.9E	- - - -		- - - -	
150000Z	15.3N	147.1E	- - - -		- - - -	
150600Z	16.2N	146.3E	- - - -		- - - -	
151200Z	17.1N	145.7E	- - - -		- - - -	
151800Z	18.0N	145.0E	204	205	- - - -	
160000Z	18.7N	144.1E	213	240	- - - -	
160600Z	19.1N	143.1E	119	40	- - - -	
161200Z	19.5N	142.2E	093	46	- - - -	
161800Z	19.7N	141.5E	055	86	205	226
170000Z	20.0N	141.1E	009	145	221	366
170600Z	20.2N	140.8E	001	179	007	70
171200Z	20.6N	140.8E	336	185	344	87
171800Z	20.9N	140.9E	326	200	351	151
180000Z	21.3N	141.1E	271	114	351	275
180600Z	21.8N	141.3E	252	144	353	295
181200Z	22.5N	141.7E	237	151	323	311
181800Z	23.5N	142.2E	232	220	312	325
190000Z	24.8N	142.7E	223	183	240	326
190600Z	26.8N	143.1E	191	151	220	422
191200Z	29.2N	143.3E	185	261	210	525
191800Z	31.3N	143.5E	179	307	208	631
200000Z	32.8N	143.9E	153	122	200	512
200600Z	34.1N	144.5E	143	153	178	383
201200Z	35.4N	145.3E	- - - -		- - - -	
201800Z	36.5N	146.1E	- - - -		- - - -	
210000Z	37.6N	147.1E	- - - -		- - - -	
210600Z	38.8N	148.6E	- - - -		- - - -	

AVERAGE 24 HOUR ERROR 165 MI
AVERAGE 48 HOUR ERROR 327 MI

